

IN THE CLAIMS:

Please amend Claims 1 to 3, 10 and 11 to read as follows. A marked-up copy of Claims 1 to 3, 10 and 11, showing the changes made thereto, is attached. Note that all claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

1. (Twice Amended) An image pickup method for increasing an apparent dynamic range of a video signal by selecting a proper exposure portion from a plurality of images sequentially picked up at different exposure amounts, wherein a motion vector of a video signal is detected, and if the detection result indicates that the motion vector is larger than a predetermined threshold value, a plurality of images are added to produce a corresponding portion of an image.

2. (Twice Amended) An image pickup method for increasing an apparent dynamic range of a video signal by selecting a proper exposure portion from a plurality of images sequentially picked up at different exposure amounts, comprising:

a motion vector detecting step of detecting a motion vector between corresponding pixels in the plurality of images;

a vector difference detecting step of detecting a difference between a motion vector detected in said motion vector detecting step and a motion vector between the plurality of images;

a comparison step of comparing the detection result of said vector difference detecting step with a predetermined threshold value; and
a synthesization inhibiting step of inhibiting image synthesization if the comparison result in said motion vector comparison step is larger than the predetermined threshold value, and a plurality of images are added to produce a corresponding portion of an image.

3. (Twice Amended) An image pickup method for increasing an apparent dynamic range of a video signal by selecting a proper exposure portion from a plurality of images sequentially picked up at different exposure amounts, comprising:

a motion vector detecting step of detecting a motion vector between corresponding pixels in the plurality of images;

a vector difference detecting step of detecting a difference between a motion vector detected in said motion vector detecting step and a motion vector between the plurality of images;

a comparison step of comparing the detection result of said vector difference detecting step with a predetermined threshold value;

a coordinate converting step of performing a coordinate conversion of the plurality of images in correspondence with an image shift caused by a time difference when the plurality of images are picked up, if the comparison result at said motion vector comparison step is smaller than the predetermined threshold value; and

an image synthesizing step of synthesizing the plurality of images with the image shift corrected at said coordinate converting step, into a single image, if the comparison result at said motion vector comparison is larger than the predetermined threshold, wherein said image synthesizing step is inhibited and a plurality of images are added to produce a corresponding portion of an image if the comparison result at said motion vector comparison is smaller than the predetermined threshold.

4. An image pickup method according to claim 1, wherein a shutter speed is changed in order to change the exposure amount.

5. An image pickup method according to claim 2, wherein a shutter speed is changed in order to change the exposure amount.

6. An image pickup method according to claim 3, wherein a shutter speed is changed in order to change the exposure amount.

7. An image pickup method according to claim 1, wherein an iris is changed at high speed in order to change the exposure amount.

8. An image pickup method according to claim 2, wherein an iris is changed at high speed in order to change the exposure amount.

9. An image pickup method according to claim 3, wherein an iris is changed at high speed in order to change the exposure amount.

10. (Twice Amended) An image pickup apparatus in which an apparent dynamic range of a video signal is increased by selecting a proper exposure portion from a plurality of images sequentially picked up at different exposure amounts, comprising:

motion vector detecting means for detecting a motion vector of the video signal;

comparison means for comparing a detection result by said motion vector detecting means with a predetermined threshold value; and

synthesization inhibiting means for inhibiting image synthesization if the comparison result by said comparison means is larger than the predetermined threshold value, while a plurality of images are added to produce a corresponding portion of an image .

11. (Twice Amended) An image pickup apparatus in which an apparent dynamic range of a video signal is increased by selecting a proper exposure portion from a plurality of images sequentially picked up at different exposure amounts, comprising:

motion vector detecting means for detecting a motion vector between corresponding pixels in the plurality of images;

vector difference detecting means for detecting a difference between a motion vector detected by said motion vector detecting means and a motion vector between the plurality of images;

comparison means for comparing the detection result by said vector difference detecting means with a predetermined threshold value;

coordinate converting means for performing a coordinate conversion of the plurality of images in correspondence with an image shift caused by a time difference when the plurality of images are picked up, if the comparison result by said motion vector comparison means is smaller than the predetermined threshold value; and

image synthesizing means for synthesizing the plurality of images with the image shift corrected by said coordinate converting means, into a single image, if the comparison result at said motion vector comparison is larger than the predetermined threshold, wherein image synthesization by said image synthesizing means is inhibited while a plurality of images are added to produce a corresponding portion of an image if the comparison result at said motion vector comparison is smaller than the predetermined threshold.

12. An image pickup apparatus according to claim 10, wherein a shutter speed is changed in order to change the exposure amount.

13. An image pickup apparatus according to claim 11, wherein a shutter speed is changed in order to change the exposure amount.